

SCECAP 2004 -- Open Water

Sediment characteristics, contaminants, and toxicity

Station	Characteristics			Contaminants				Toxicity				
	Percent Silt/Clay	TOC % of Total	TAN (mg/l)	ERMQ	Metals*	PAHs*	Pest*	PCBs*	Microtox® Assay		Seed Clam Assay	
									EC ₅₀ Percent	Toxic	Mean Growth	Toxic
RO046061	58.2	2.1	12.0	0.030	1				0.0	†	-4.2	†
RO046062	78.2	4.3	14.5	0.041	1				0.0	†	14.2	
RO046063	1.3	0.035		0.004					9.7		40.3	
RO046064	59.9	2.9	6.0	0.026	2				0.0	†	4.4	†
RO046065	2.0	0.2	1.0	0.007					0.5		28.0	
RO046066	9.0	0.3	1.6	0.012					0.3	†	12.6	†
RO046067	11.0	0.3	1.8	0.009					0.4	†	19.5	
RO046068	17.5	0.4	2.4	0.012					0.2	†	24.3	
RO046069	9.6	0.2	4.0	0.005					1.2		23.0	
RO046070	15.0	0.7	2.3	0.012					1.4		30.9	
RO046071	32.3	1.8	7.9	0.025		1			0.1	†	17.3	
RO046072	26.8	0.9	2.7	0.017					0.1	†	19.8	
RO046073	47.1	0.2	1.1	0.026		1			0.6		20.6	
RO046074	40.5	1.1	3.0	0.018					0.2	†	23.8	
RO046075	3.9	0.2	1.5	0.009					3.5		43.1	
RO046076	94.7	5.5	30.5	0.041	2				0.1	†	-2.9	
RO046077	7.3	0.1	2.7	0.108		2			2.9		21.1	
RO046078	71.3	1.6	4.3	0.038	2				0.1	†	22.4	
RO046079	12.1	0.2	2.6	0.008					0.2	†	25.2	
RO046080	18.4	0.4	1.5	0.007					0.3	†	36.5	
RO046081	4.7	0.1	0.2	0.003					1.5		29.0	
RO046082	4.6	0.0	0.8	0.005					12.0		17.8	†
RO046083	1.3	0.0	0.3	0.004					13.3		23.3	
RO046084	28.3	1.3	3.2	0.023					0.1	†	37.8	
RO046085	10.2	0.3	4.1	0.012					1.2		23.0	
RO046086	3.4	0.1	0.8	0.007					2.2		30.4	
RO046087	15.8	0.3	2.2	0.013					0.1	†	44.9	
RO046088	22.6	0.5	2.3	0.012					1.0		35.1	
RO046089	14.8	0.3	1.9	0.009					0.2	†	23.0	
RO046090	2.9	0.0	0.6	0.006					9.5		35.6	
**RO046286	10.4	0.3	1.4	0.010					0.1	†	34.8	
Mean	24.2	0.9	4.1	0.018					2.1		24.0	

† = Toxic: Microtox, EC₅₀ <0.5 if silt-clay < 20% , <0.2 if silt-clay > 20% (Ringwood et al., 1997, criterion #6); Seed Clam Assay, if mean clam

growth is < 80% of mean clam control growth AND significantly different from mean clam control growth

Grey box: Values exceed threshold representing moderate risk of benthic impacts (Hyland et al., 1999)

Black box: Values exceed threshold representing high risk of benthic impacts (Hyland et al., 1999)

* Number of analytes that exceed Effects Range Low (ER-L) guidelines (Long et al., 1995)

**Additional station sampled in Charleston Harbor which is not included in the mean